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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/643,765	08/23/2000	Teruyuki Motohashi	Q60573	9997

7590 07/30/2003
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EXAMINER

HARRY, ANDREW T

ART UNIT	PAPER NUMBER
2686	

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/643,765

Applicant(s)

MOTOHASHI, TERUYUKI

Examiner

Andrew T Harry

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4,5,7,8,10-15,19 and 20 is/are rejected.
- 7) ☒ Claim(s) 3,6,9 and 16-18 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 January 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

The Examiner acknowledges the receipt of the Applicants amendment filed May 20, 2003. In the Amendment the Applicant argues the status of claims 1-18 as they stand and adds claims 18-20.

Response to Arguments

Applicant's arguments filed May 20, 2003 have been fully considered but they are not persuasive.

Response to Applicant's arguments regarding claim 1, 7, 8 and 10-12

In the Applicant's first argument it is stated, "Smith does not teach limiting the amount of current drawn from the battery. See page 4, ¶ 2. However, in the next sentence the Applicant concedes, "Smith teaches cutting off all current drawn from a battery should the current exceed a threshold." This is clearly limiting the amount of current drawn from the battery; it may be limiting it to the point of drawing no current but is still "limiting" the amount.

The Applicant then argues that the Examiner's combination of Smith and Liukkonen. The Examiner maintains that the combination of the two inventions is correct since one of ordinary skill in the art at the time of the invention would know that Liukkonen's device would have need to have been implemented with some type of current limitation or power control device. Smith's teaching would have filled the need for Liukkonen's device to have this power/current control so that the phone could monitor and control the current and power being

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drawn from the battery. Most all electronic devices built at the time of Liukkonen's device would have been implemented with a current level-monitoring device such as the device taught by Smith.

The Applicant then revisits the argument that Smith's method of completely limiting the current drawn from the battery is not "controlling the driving current of the light emitting element." The Examiner again reiterates that completely limiting the current drawn from the battery *is*, in fact, controlling the current.

The Applicant then claims that the Examiner failed to address the feature of "judging whether a radio communication function section is in radio communication or not." The Applicant backs his argument by stating that the radio communications function is not the only function that will draw current from the battery, and thus limiting the current simply based on total current drawn from the battery reflects more than just the operation of the radio section of the phone. The Examiner agrees with the Applicant's assertion, but maintains that all mobile communication devices have a capability to "judge" or detect if the device is engaged in radio communications. Otherwise, the device would not have the ability to activate certain features of the phone that are only operational when the device is engaged in radio communications. See *Liukkonen et al.*, col. 3, lines 31-60. When the user detects an incoming call and decides to activate the phone to answer the call, the CPU of the phone must be able to detect the user's actions to activate the radio communication portion of the phone, otherwise the user would be unable to answer or hang-up the phone. The CPU then "judges" or detects whether the device is in radio communications or not.

Response to Applicant's arguments regarding claim 2

The Examiner asserts that Descombes was cited regarding claim 2 in the previous office action, but the rejection was clearly made in view of Smith and Liukkonen. Since the rejection was made in view of Descombes and Liukkonen, which are both available as prior art to the Examiner, the rejection is correct and stands on its merits.

Response to Applicant's arguments regarding claim 4, 5, and 13-15

The Applicant argues that claim 4 recites the feature of selecting an infrared communication function section among a plurality of infrared communication function sections. As interpreted by the Examiner this claim is very broad and the "plurality...of sections" could simply mean a plurality of current levels for which the infrared communications operates. As discussed above regarding claim 1 the combination of Smith and Liukkonen teaches that the infrared communications could be operated at a normal current level or that the infrared communications could be cut off from current completely. These are clearly two different functional sections of the infrared communications section that are "selected" based on the amount of current being drawn from the battery of the device.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 4-5, 7-8 and 10-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over ***Liukkonen et al.* U.S. Patent 6,230,214** [hereinafter referred to as "*Liukkonen*"], and further in view of ***Smith* U.S. Patent 6,014,030** [hereinafter referred to as "*Smith*"].

As pertaining to **claims 1, 2, 4, 7, 10-15, and 19-20**, *Liukkonen* teaches a communication method and apparatus for a portable radio terminal with an IR communication function including an information processing section (see *Liukkonen*, col. 3 lines 30-45). However, the concept of judging whether or not the radio communications function is in communication and assigning a driving current/controlling the IR output, to the IR communication section based on that result is not disclosed by *Liukkonen*. *Smith*, teaches a protective circuit for a battery that limits the amount of current drawn from the battery, by multiple loads to prevent permanent damage from occurring to the battery (see *Smith*, col. 6 line 55-col. 12 line 12). It would have been obvious to one of ordinary skill in the art at the time of the invention to add to *Liukkonen*, *Smith*'s method of controlling the current that is drawn away from the battery in the phone, and by doing this the driving current of the IR function would be limited by the battery circuit described by *Smith*. This addition would have allowed the battery in *Liukkonens*' device to operate without causing harm to the battery used to provide current to the IR function and radio communication function in his device. Another inherent aspect of the combination would include allowing the light

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emitting element to not be restricted when the radio communication function is not in radio communication and causing it to be restricted when the radio communication function is in radio communication. Another inherent aspect of the combination would be to enable the light emitting element in the infrared communication function section to output infrared light. See *Liukkonen*, col. 3, line 31-col. 4, line 18.

As pertaining to **claims 5, and 8**, *Liukkonens*' teachings as modified by *Smith* above regarding claims 1, 4, and 7, teaches that the driving current of the light emitting diode (battery load) can be controlled in accordance with the power allocated to it in accordance with a reduced transmission power value depending on the transmission power value of the radio communication function (see *Smith*, col. 6 line 55-col. 12 line 12).

Claims 3, 6, 9, and 16-18 are allowable over the prior art

Allowable Subject Matter

Claims 3, 6, 9, and 16-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

A. Kaikuranta et al., U.S. Patent 6,031,825 teaches an infrared audio link in a mobile phone.

B. Sulavuori et al., U.S. Patent 5,636,264 teaches a radio telephone system which utilizes an infrared signal communications link.

C. Potega, U.S. Patent 6,459,175 teaches a universal power supply.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Harry whose telephone number is 703-305-4749. The examiner can normally be reached on M-F 8:30 - 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 703-305-4379. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

ATH

July 24, 2003

Marsha D Banks-Harold

MARSHA D. BANKS-HAROLD
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